

SEPARATORS

ROUND



SWECO® VIBRO-ENERGY® ROUND SEPARATORS

SINCE 1939 WHEN THE FIRST VIBRATORY
SEPARATOR WAS DEVELOPED TO TODAY'S
HIGH YIELD VIBRO-ENERGY ROUND
SEPARATOR, SWECO HAS CONTINUED A
TRADITION OF SOLUTIONS AND SERVICE.



HX48 VIBRO-ENERGY
ROUND SEPARATOR

ROUND SEPARATORS

Ideal for separating solids from liquids or segregating dry materials into various particle sizes.

SWECO TRUSTED AROUND THE WORLD

Manufacturers worldwide rely on SWECO. We span five continents with manufacturing sites, joint ventures, service offices and sales and service

representatives. So wherever you are, be assured that SWECO - the global leader in screening technology - is there when you need us.

DELIVERING MORE THAN MACHINERY

When you choose SWECO, you get more than a piece of equipment. You get decades of technological innovation. Superior engineering. Problem solving. And with our extensive worldwide rep force, customer support is always close at hand.

Whether you use our testing facilities in the United States, Belgium – or we bring our expertise onsite to your location – we can help you perfect your process to maximize output, efficiency and consistency while

minimizing downtime and waste.

SWECO is recognized for our commitment to the highest quality management and environmental standards, earning various ISO registration standards in our manufacturing facilities around the world.

Through R&D, superior engineering and unparalleled customer support, you can feel confident turning to SWECO for solutions, not just machinery.



SWECO advantages and features

SWECO designs are highly versatile and can be customized to your requirements. With decades of design experience in separators, we have developed hundreds of options and components that can be used to optimize a solution for your process. SWECO's extensive database of engineering designs allows us to "plug-and-play" with these components to develop your solution.

WIDEST RANGE OF MATERIALS SCREENED.

Only SWECO separators can handle such a broad range of materials... wet or dry, fine or coarse, heavy or light. Particles as fine as 400 mesh can be screened at high production rates.

SINGLE OR MULTIPLE SEPARATIONS.

As many as four screen decks can be incorporated in one SWECO Separator, providing simultaneous separation into five fractions.

LESS BLINDING.

Vibro-Energy action holds most screen blinding to an acceptable minimum. However, certain materials have inherent blinding characteristics. For unusual situations, SWECO has developed accessories to eliminate blinding.

GREATER CAPACITY.

In comparative tests, SWECO Separators have shown greater capacity per square foot of screening area (from 1 to 90 sq. ft.) than other types of screening devices.

HIGHEST EFFICIENCY.

Our ProGlide Linear Weight System adjustment assures more efficient processing than any other screening device. The weights are moved radially, allowing the operator to dial in the optimal amplitudes and force to improve each separator's efficiency and throughput.

LONGER SCREEN LIFE.

Each screen cloth is held in uniform tension by drawing it taut on tension rings. The drum-tight screening surface vibrates freely without whipping against rigid supports, greatly reducing screen wear and increasing screen life.

MINIMAL TRANSMITTED VIBRATION.

No special flooring or foundation is generally required. The unit may be placed (and easily moved) wherever it is needed. Many users mount their SWECO units on casters, on top of bins, on open grids, on wood, on upper floors, or on light structures not designed for rectangular vibratory screening equipment.

LESS SPACE REQUIRED.

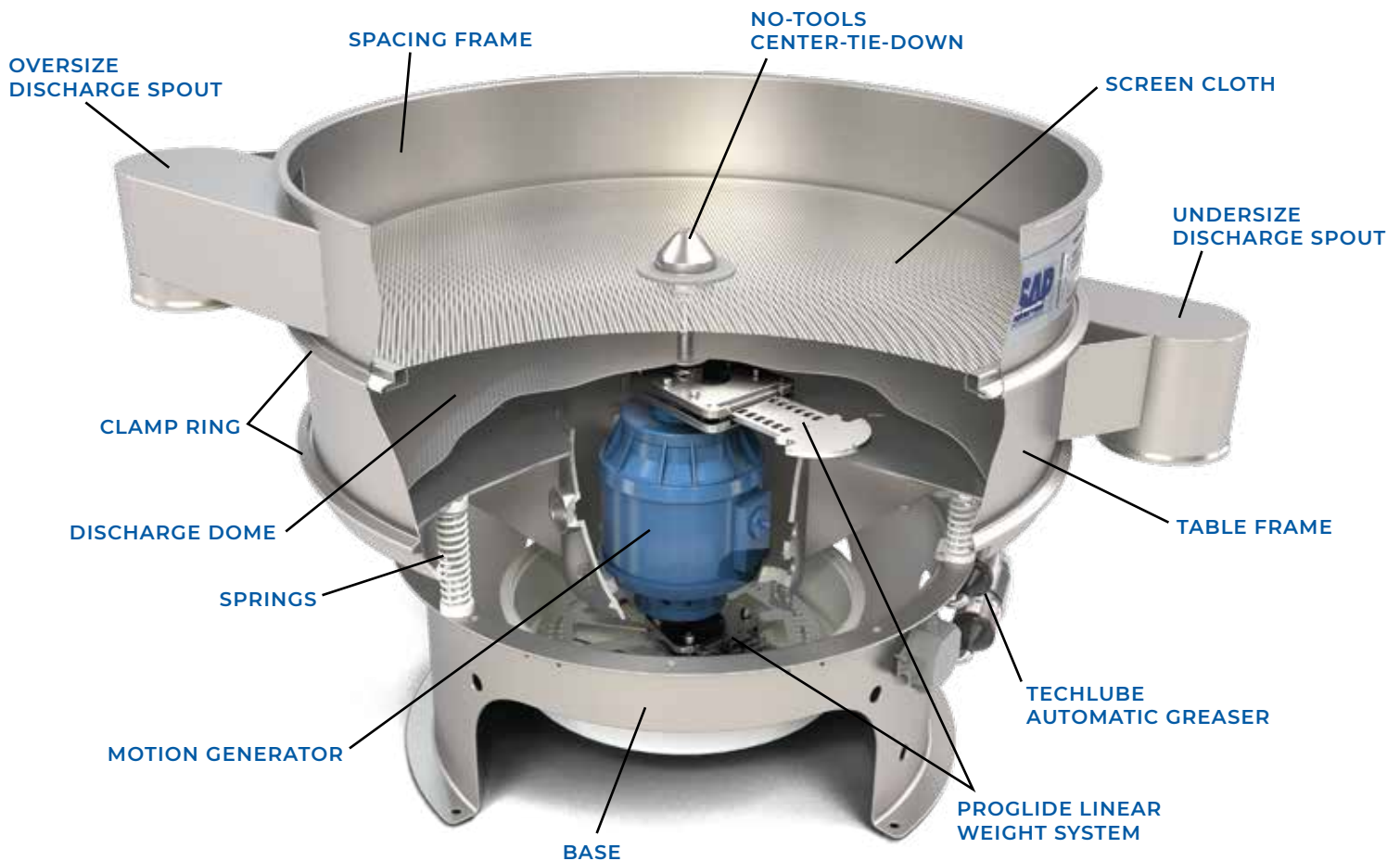
For equivalent capacity, SWECO Avalanche Separators require less working floor space than other screening systems. Compact SWECO Low Profile units normally fit right into existing production lines.

ECONOMY - LONG LIFE, LESS POWER, LOW MAINTENANCE.

Simplicity of design with few moving parts assures long life with little maintenance. Because of efficient design, SWECO Separators require less horsepower than other units of similar capacity. Remarkably long screen life and the ease with which screens may be changed result in further economies.

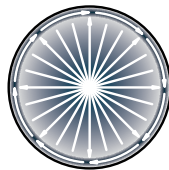


VIBRO-ENERGY SEPARATORS - INTERIOR VIEW

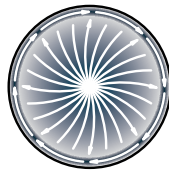


HOW SWECO VIBRO-ENERGY SEPARATORS WORK

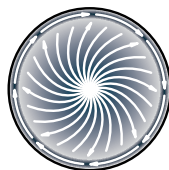
Basically, the SWECO Separator is a screening device that vibrates about its center of mass. Vibration is accomplished by eccentric weights on the upper and lower ends of the motion-generator shaft. Rotation of the top weight creates vibration in the horizontal plane, which causes material to move across the screen cloth to the periphery. The lower weight acts to tilt the machine, causing vibration in the vertical and tangential planes. Speed and spiral pattern of material travel over the screen cloth can be set by the operator for maximum throughput and screening efficiency of any screenable product... wet or dry... heavy or light... coarse or fine... hot or cold.



0° LEAD - Material is thrown straight and gives insufficient separation



15° LEAD - Material begins to spiral



35° LEAD - Gives material maximum efficient screening pattern



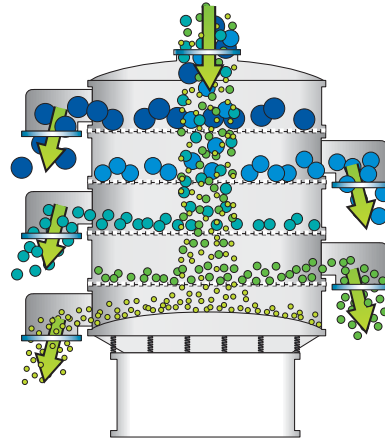
90° LEAD - Keeps oversize material from being discharged and assists in receiving maximum throughput of minus material which tends to "ball"

Separation processes

SIZING

Segregation of a variety of solid particles into separate groups containing comparable sizes. Up to 5 separations simultaneously.

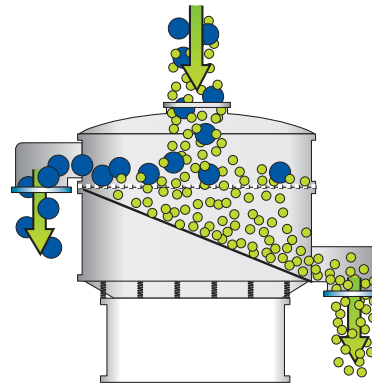
Sugar - spices - starch - soybeans - sawdust - salt - instant potatoes - animal feed - sand - abrasives - grit/shot - glass beads - detergents - rubber - polystyrene beads - paint - iron oxide - lead - tungsten carbide - ceramic and metallic powders - milling products - powdered pharmaceuticals - chemical and food products



SCALPING

Removal of a small quantity of undesirable oversize particles in a high-throughput process.

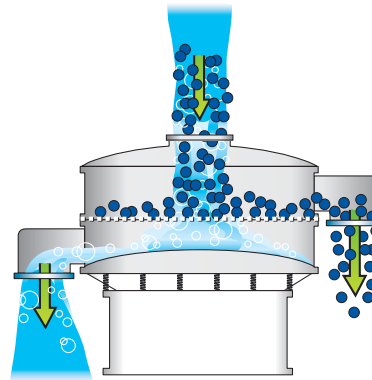
Powdered milk - cereals and grains - sugar - instant coffee granules - chocolate powder - soybean flour - broth concentrate - potato granules - borax - abrasives - carbon black - metal powders - sand - paint - casein - plaster - detergents - fertilizer - tobacco - bone, blood and feather meal



GRAVITY FILTERING / PRODUCT RECOVERY

Filtering oversize solids from all types of slurries, or dewatering solid/liquid mixtures. Reclaiming usable solids or clarifying liquids, either of which has further economic value.

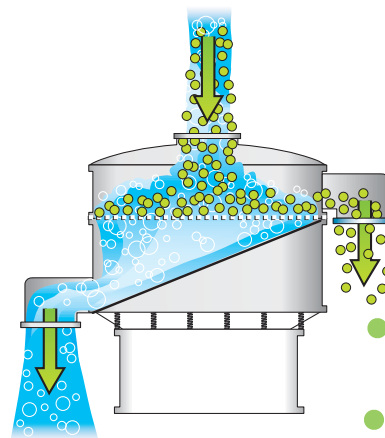
Fruit juices - fish - soybean oil - brewer's yeast - sugar beets - other food products - latex - paint - catalyst - pulp and paper - carpets - animal blood - tallow - ceramic - kaolin - metallurgy - pharmaceuticals - ice cream



WASTEWATER CLEAN-UP AND WATER POLLUTION CONTROL

Efficient recovery of usable solids, and water clean-up and re-use.

Potato peelings and waste - other food products - latex and other chemical products - manure - sewage - fruit - vegetable and pickle canneries - meat - poultry and seafood processors - brewery waste - laundry waste - pulp and paper effluent



VIBRO-ENERGY SEPARATORS - FOR ALL YOUR SCREENING NEEDS

PHARMASEP FILTER/DRYER

A fully contained Vibro-Energy filter/dryer suitable for aseptic processes in the pharmaceutical, food and specialty chemicals industries. With a design that eliminates gaps, crevices and hidden areas, the PharmASep proves valuable to those processes handling potent or toxic substances. In the case of wet sieving, the PharmASep can dewater and vacuum dry the product on the screen eliminating additional handling and equipment. CIP/SIP capability is available for all PharmASep filter/dryers.

ULTRASONIC TECHNOLOGY

The Sono-Energy creates a secondary ultrasonic vibration that prevents blinding on fine meshes (60-635 mesh) as well as improving flow rates on hard-to-screen products at fine meshes. Numerous applications exist for epoxy powders, powder paints and toner powders. Sono-Energy also works well on heavy density powdered metals including lead, nickel and chromium by preventing lodging of near-size particles.

PSI SIFTER

The Pneumatic SWECO In-line (PSI) Sifter is used to sift dry flowing material in a pressurized pneumatic conveying line. It can be used to segregate smaller particles from larger and to remove foreign matter. Typical applications include flour, starch, salt, sugar and plastics.

VIBRO-ENERGY ROUND SEPARATOR

Separate solids from liquids or segregate dry materials into various sizes. Particles as fine as 400 mesh (38 microns) can be screened with up to 4 screen decks incorporated in one SWECO Separator. No special

flooring or foundation is needed unless working floor space is required. Simple and efficient design requires less horsepower. No one has more experience creating round separation solutions ... we've been 'round since 1917.

QUICKCHANGE SEPARATOR

The patented QuickChange reduces screen changing to a one-person operation, greatly reducing the necessary labor and eliminating the need to involve maintenance crews.

Powered by a self-contained pneumatic or hydraulic unit, screen changes can be made quickly, significantly reducing downtime and greatly increasing productivity.

BAG DUMPER & SCREENER

The Bag Dumper with integral dust collector significantly reduces worker exposure to nuisance dust by providing substantial vacuum below the bag dump screen rather than above. This pulls dust down and away from the operator, greatly improving airborne particulate flow into the collection system's filters. Additionally, potential injuries can be avoided because this system is designed to be ergonomically correct at the standard height of the worker. The system utilizes a SWECO LX Low Profile Separator to scalp large pieces and bag parts from bags of ingredients that go into dry and wet mixes.

AVALANCHE

The dual screen design of the Avalanche separator effectively increases active screen area by up to 67%. The design is simple: a standard diameter frame is modified to accommodate a standard screen on the bottom with an additional, slightly smaller screen above. Material fed to the top screen either passes through the screen or discharges off the sides to be rescreened by the lower screen. The Avalanche is particularly beneficial in dry applications requiring high capacity scalping (PVC, starch, flour) as well as high efficiency dedusting (EPS beads, dry chemicals).

LOW PROFILE

The Low Profile Flow-Thru Separator offers high-capacity wet or dry scalping in a compact, low-headroom design. Dual motors mounted on opposite sides of the Low Profile create the 3-D motion that allows maximum flow-thru of material. Also available is a one motor design engineered

to induce a sifting motion across the screen plane, excellent for sifting lighter products. Because of its low-headroom requirements (as little as 15 inches) and straight, flow-thru design, the Low Profiles fit easily into existing product lines without reworking the entire system.



AUTHENTIC SWECO AFTERMARKET PRODUCTS

SUPERIOR SCREENING SOLUTIONS

From spot welded and Supertaut Plus screens to our patented Fusion Screen technology, SWECO offers the industry's widest variety of screen solutions to meet any separation challenge. For unique screening applications, SWECO custom manufactures screens to meet any requirements. SWECO offers a full line of Market Grade, Tensile Bolting Cloth, Clear Opening and U.S. Standard Sieve Cloths. Our specialty screen products include Sanitary, 3A Sanitary, Ultrasonic, Parallel Flow and 430 Magnetic offerings. Like our separation equipment, SWECO screens are made with a commitment to superior manufacturing and quality. Whatever your screening needs, SWECO has your solution.



MOTION GENERATORS

SWECO Motion Generators have extra-strong, high tensile strength castings which provide rugged vertical mounting support for severe vibration service. Their larger, tougher SWECO engineered bearings provide higher dynamic load capabilities for longer Motion Generator life. SWECO offers TENV, TEEP and Hostile Duty Motion Generators. In addition, we offer the SWECO REPAIR PLUS program, backed by a guarantee on all repairs and rebuilds.



AUTHENTIC SWECO AFTERMARKET

Covers, Springs, Frames... All of SWECO's genuine aftermarket parts are built to the same exacting standards as our original equipment and most products can be modified to custom-fit your application. We offer a wide variety of customization options including hand polishing, frame linings and special fittings. And SWECO authentic aftermarket products are so dependable ... they're guaranteed.



PROGLIDE LINEAR WEIGHT SYSTEM

The top and bottom weights are equivalent and easy to adjust as there is only one weight to move. The weights are moved radially to dial in the optimal horizontal and vertical amplitude and force to improve each separator's efficiency and throughput. All changes are done without the use of tools. The ProGlide is only available on HX models.

FORCE WHEEL

The "No-Tools" Force Wheels allow you to adjust the amplitude and screening pattern of your separator without the use of tools. The

patented all metal weight adjustment mechanism can be used at up to 400°F.



BE SURE TO SPECIFY

ASAP
AUTHENTIC SWECO AFTERMARKET PRODUCTS®



RUBBER GOODS

To accommodate your different applications, SWECO offers a variety of rubber goods. SWECO gaskets are available in several profiles and a wide array of materials. Our flexible spout connectors are available in durable and abrasion-resistant elastomers, many of which are FDA approved for contact with food products. Whatever your application calls for, SWECO has a product to fit your needs.



CENTER-TIE-DOWN

The "No-Tools" Center-Tie-Down allows you to change a screen in a fraction of the time and gives you the ability to tension the screen from the top. The Center-Tie-Downs are suited to 220°F and are constructed of Food Grade Nylon.



TECHLUBE

Eliminate manual regreasing with the SWECO TechLube - an automatic grease relubricator. The TechLube is an economic solution to attaining proper grease relubrication. Made to adapt directly to existing SWECO Motion Generators, TechLube provides the right grease at the right time in just the right amount. Custom packed with SWECO premium grease, TechLube is the smart choice for your Motion Generator.



SELF-CLEANING KIT

BALL TRAY



SELF-CLEANING DEVICES

SWECO Self-Cleaning Kits and Ball Trays aid in screen cleaning for increased screening efficiency. By reducing the amount of near-size particles lodged in the openings of the wire mesh (blinding), the Self-Cleaning Devices improve dry sizing and liquid/solid separation.



ELECTRICAL CONTROLS

SWECO offers a variety of electrical controls with advanced safety features that make our products safer for our customers. Most SWECO controls have terminal blocks that provide safe and fast electrical connections. Additionally, most of our controls have flush start buttons, protruding stop buttons, power lights, and lockable disconnects. All SWECO controls provide environmental protection for electrical components and are constructed of NEMA 4X fiberglass, NEMA 4X stainless or painted steel, NEMA 4 painted steel or NEMA 12 painted steel.



We offer equipment that meet specifications from these and other industry organizations.

YOUR PROCESS SOLUTIONS PROVIDER FOR SCREENING, SEPARATING AND GRINDING EQUIPMENT

PACKED VESSEL HYDROCYCLONES

SWECO Hydrocyclone Systems provide an economical and effective method for removing solid particles in the 4 to 100+ micron range from various slurries. Hydrocyclones, supplied in either an open-manifold or a Packed-Vessel configuration, typically make finer separations than are practical with screening separators and at significantly higher capacities.

WHITE WATER FILTERS

Provides high liquid flow rate (up to 4000 gpm) fine mesh centrifugal screening to remove particles larger than screen mesh. Most commonly used for White Water screening in the paper industry, it can also handle other effluent and recycle streams. Units available to remove suspended solids down to 325 mesh (44 microns).

STA-SIEVE STATIONARY SCREENERS

Provides quick and efficient separation of solids from liquid. Ideally suited for processors that use large quantities of water. Advantages of this low-cost unit include high flow rate, long screen life and no moving parts. Can be operated independently or as a system component in conjunction with SWECO Separators or Centrifugal Screen Concentrators.

GRINDING MILLS

Most versatile line of mills available today for fast, low-cost particle size reduction to sub-micron range. Vibro-Energy grinding action achieves higher output per input horsepower; precise control of size and size distribution. Product contamination from media and lining wear is virtually eliminated.

ATLAS GYRATORY SIFTERS

Another separation solution to further optimize your facilities' production, the ATLAS Gyratory Sifter maximizes productivity, creates a uniform sifting motion across an entire screen deck to maximize efficiency, and enables maximum recovery of clean, acceptable product.

DECANTER CENTRIFUGES

The premier high-speed, decanting centrifuges for fluids cleaning and solids removal and product recovery applications. Ruggedly built for industrial service, they are especially effective in environmentally sensitive areas. They deliver high recovery rates and efficient solids separation.

TURBO-SCREEN AIR CLASSIFIERS

Provides continuous, precise screening of dry materials, especially in the finer particle sizes. Uses screen sizes from 20-400 mesh for efficient separation of particles ranging from 850-38 microns. Handles the most difficult materials, including electrostatic materials and particles that tend to agglomerate easily.

RECTANGULAR SEPARATORS

New technology adapts ultra-fine screen mesh for use in rectangular high-capacity separators (up to 48 ft² per deck), yielding benefits previously found only on small circular screens. Fine-mesh screen panels can be installed in five minutes without tools. Once in place, an O-ring system creates a positive seal against bypass.

CENTRIFUGAL SIFTERS

The Centrifugal Sifter design creates a unique centrifugal force by the rotation of beater bars, which propel material through the full-length cylindrical pre-screen and screen surface. The full-length discharge chute collects screened product, while oversize materials are removed through the forward discharge chute. The CS, designed for processes where hygiene is critical, contains a patented Air Tension System which enables the unit to use fine mesh screens.





GLOBAL LEADERS IN SEPARATION TECHNOLOGY

WE PUT TECHNOLOGY IN MOTION™

SINCE 1942, SWECO has been on the cutting edge of vibratory separation technology. From the development of the first vibratory separator through the continual breakthrough innovations in the industry, SWECO has been in the business of providing solutions.



SWECO, SWECO and logo, Motion Generator, ProGlide, TechLube, QuickChange, PSI, Adjust-A-Vibe, Supertaut, Fusion, PharmASep, Vibro-Dry, Sta-Sieve, Turbo-Screen, Vibro-Energy, Sono-Energy, Avalanche, Accu-Feed, and We Put Technology in Motion are trademarks or registered trademarks of Schlumberger.



Manufacturers worldwide rely on SWECO.

We span five continents with 9 manufacturing and support facilities and over 100 sales and service representative offices.

So, wherever you are, be assured that SWECO – the global leader in screening technology – is there when you need us.

SWECO has sales agents and/or licensees in most countries.